

CHANGE HOW YOU DRESS FOR WARM WEATHER.

IT'S TIME FOR A CHANGE

Cotton is the king of casual warm weather dressing. It is highly breathable, absorbing body moisture vapor and light sweat from our bodies so we feel less sticky, more cool and comfortable in the heat. Under heavy exertion though, cotton will wet-out. Excess moisture (sweat) makes the fibers swell, creating a barrier to breathability. Your feel-good Tshirt turns into a soggy mess.

But that's all old news, right? That's why 100% polyester and other synthetic garments became so popular; they are quick drying. However, that fast drying speed can often be too cool for comfort. Distance athletes often complain about the discomfort of flash cooling of sweat-soaked synthetic garments, especially when the temperature drops or the wind picks up. Then there's the problem that when it's dry, a polyester shirt feels relatively warm. Who wants to wear a warm shirt on a hot day or inside the gym? Yet, many of us put up with the temperature swings to get the quick drying benefit.

INTRODUCING POLARTEC® DELTA™

Why Delta? It's not because we're suddenly sweet on the Greek alphabet. (Ok, maybe.) It's because Delta means change. It will change how you dress for warm weather activity. We like to call it the "Goldilocks" of fabrics because it's just right. Not too hot, not too cool. It successfully navigates the middle ground of natural and synthetic fibers, taking comfort cues from cotton for immediate and long term cooling ability, and synthetics for their fast dry time, reduced wet cling and chaffing. The real proof is in the wearing, but we back it up with solid textile science.

HOW DID WE DO IT?

We asked our R&D engineers to construct a radiator for cooling. A radiator is a structure that facilitates the transfer of heat from one thing to somewhere else. Sweating is the primary way our bodies dump excess heat when it's hot. So we devised a fabric that maximizes the effectiveness of your body's natural sweat

response. Our fabric radiator carries your sweat and holds it right next to your skin where it does the most good. You benefit from evaporative cooling, the removal of excess body heat, as the fabric dries.

We do fabric, so our radiator doesn't use metal fins, it uses yarns. The fabric construction features hydrophilic yarns (shown white in above picture) knit in a radiator matrix to prolong skin's natural cooling response. This yarn will absorb and distribute water/sweat around the fabric. It works kind of like the coolant in a car's radiator. It carries the sweat around so your skin can benefit from evaporative cooling. Hydrophobic zones (shown orange in picture) created by synthetic yarn and a special knit construction promote maximum breathability and a quick dry time.

The special knit structure reduces wet skin cling. And the yarns chosen have a naturally cool touch so you will want to put it on when it's hot. We added in odor control to perfect the experience, and a UPF rating in the mid weight to help keep you safe outside in the sun.

HERE'S THE PROOF

Polartec's controlled test chamber is set to a hot, moderately humid environment. A metal plate with water releasing pores imitates hot sweating skin. We place the fabric on top of the plate and measure the evaporative cooling that occurs = watts of heat energy extracted from the "skin" plate. This Polartec test is derived from the skin-model testing in ISO 11092.



OPTIMAL BASE

- Cool touch
- Superior wicking action
- Highly breathable
- Reduced skin cling
- Regulated drying
- Odor control





IMPOSSIBLE MADE POSSIBLE



POLARTEC[®] DELTA[™]

Polartec Delta[™] fabrics sit in the sweet spot or Goldilocks zone between cotton and polyester. They exhibit a comfortable cooling pattern similar to cotton, but act more like polyester for dry times and maintaining breathability when wet.

Cooling Response (30 minutes of sweating)



Time (minutes)

Breathability & Dry Time

Fabric	Dry Time- Minutes*	Breathability when dry-	Breathability when wet-
Polartec Delta [™]	15	2.7-4.0	24
100% Polyester	8	2.5-3.0	17
100% Cotton	28	4.0-5.0	31

*Average Dry Timefrom skin model testing **RET per ISO11092 ***RET from skin modeling during sweat phase

TECHNICAL HIGHLIGHTS • Cool touch

- Superior wicking action. Hydrophilic yarns prolong skin's natural evaporative cooling response
- Highly breathable. Hydrophobic zones in the knit matrix promote maximum breathability
- Reduced skin cling via surface contact reduction. Reduces chaffing and the perception of being sweaty
- Regulated drying
- Odor control



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